

The ferrules (20, 22) which the Examiner regards as the claimed device are an integral part of the male element A of an electrical connection that includes a pin (10). Male element A is made of metal and comprises a wire receiving ferrule (20) and a seal receiving ferrule (22). See column 1, lines 50-70 of the specification of the Zimmerman '572 patent and the metal cross hatching of the ferrules (20, 22) in figures 2-6 of the Zimmerman '572 patent.

The Examiner's allegation that the ferrule (22) is a molded skirt integrally formed on the sleeve is pure speculation as there is absolutely no disclosure or suggestion of the ferrule (22) being molded.

Moreover, the ferrule (22) which the Examiner regards as the claimed skirt clearly does not have a sealing surface that "has substantially the same shape as the interior surface of the cavity" as required by claim 1. The outer surface of the ferrule (22) is clearly spaced from the interior surface of the cavity (48) as best shown in figures 5 and 6 of the Zimmerman '572 patent.

Furthermore, the wire receiving ferrule (20) and the seal receiving ferrule (22) of the terminal that is disclosed in the Zimmerman '572 patent is definitely not "constructed from an electrically insulating material" as required by claim 1. The wire receiving ferrule (20) is clearly made of an electrically conductive material because it is an integral part of the male element A and engages the bare wire (18). Compare the metal cross-hatching of the wire receiving ferrule (20) and the cross hatching of the resilient seal (16).

Consequently, claim 1 is not anticipated by the Zimmerman '572 patent under 35 USC § 102 (b).

This also applies to dependent claim 3 and 4, base claim 5, dependent claim 8 and base claim 12 that have the same limitations.

As to claims 3 and 8, there is absolutely no disclosure or suggestion that the Zimmerman ferrules (20, 22) are made of an elastomeric material. Perhaps, the Examiner is confusing the Zimmerman ferrules (20, 22) with the Zimmerman resilient seal (16).

The rejection of claims 1, 3-5, and 7- 12 under 35 U.S.C § 103(a) as unpatentable over U.S. Patent 3,792,416 to Moulin in view of U.S. Patent 3,077,572 to Zimmerman is respectfully traversed.

The Moulin '416 patent discloses a seal (150) for sealing a cavity having an inner surface (82). Seal (150) includes a tubular portion or sleeve (154) as well as a radially extending flange (158) and a wiping land (174) that are integrally formed with the sleeve, as best shown in figure 5 of the Moulin '415 patent. The flange (158) is deformed into a cup shaped configuration in sealing contact with inner surface (82) when the seal (150) is inserted into the cavity as best shown in figure 2a.

The Examiner admits that the seal (150) disclosed in the Moulin '416 patent does not have a molded skirt integrally formed on the sleeve.¹ However, the Examiner states that "Zimmerman teaches that it is known in the art to make a molded skirt (22) integrally formed on the sleeve (20)" and then opines that "it would have been obvious to one of ordinary skill in the art at the time the invention was made [to incorporate] a molded skirt, as taught by Zimmerman, into a sealing device as described by Moulin, in order to make a better sealing between the inside surface of the cavity and the sealing surface and to prevent lost [sic, loss] in the sealing contact because of excessive wrinkled [sic, wrinkles]."

As indicated above, the Zimmerman '572 patent does not disclose a molded skirt (22) integrally formed on the sleeve (20). There is absolutely no disclosure or suggestion that the Zimmerman seal receiving ferrule (22) is molded.

But more importantly, the seal receiving ferrule (22) is not a seal and clearly does not have a sealing surface that "has substantially the same shape as the interior surface of the cavity". The outer surface of the ferrule (22) is clearly spaced from the interior surface of the cavity (48) as best shown in figures 5 and 6 of the Zimmerman '572 patent. Hence, the Zimmerman sealing receiving ferrule (22) does not suggest anything with respect to a seal, per se, nor anything with respect to a seal having sealing surface that "has substantially the same shape as the interior surface of the cavity" as required by claim 1.

¹ The Moulin '416 patent is discussed in the patent application in the background of the invention and in fact represents the prior art that the claimed invention improves upon.

Moreover, the Zimmerman '572 patent is non-analogous art as applied by the examiner because the seal receiving ferrule (22) is concerned with attaching the seal (16) to a male element A and not with the interaction of the seal with the interior surface (48) of the cavity. The Zimmerman '572 patent in fact teaches away from the invention of claim 1 because the Zimmerman '572 patent suggests replacing the Moulin radially extending flange (158) with the elongate, thick, annular portion (35) of the Zimmerman seal (16) which is clearly not "a molded skirt...comprising an interior surface and a sealing surface."

Thus claim 1 is not obvious in view of these two references under 35 U.S.C. 103(b) for several reasons as indicated above.

This also applies to dependent claim 3 and 4, base claim 5, dependent claims 7-8, base claim 9, dependent claims 10-11 and base claim 12 for one or more of the foregoing reasons.

Reconsideration of claims 1, 3-5, and 7-12 in view of the foregoing remarks is respectfully requested.

April 24, 2003

If it is determined that any fees are due, the commissioner is hereby authorized and respectfully requested to charge such fees to Deposit Account No. 50-0831.

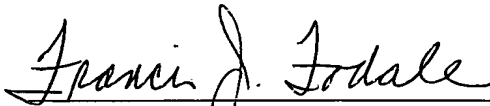
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on April 24, 2003.


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